

*AMENDMENTS TO THE CLAIMS*

1. (Currently Amended) An air cleaning device with a photocatalyst, comprising:  
a body (1);  
~~a first filter unit (4);~~  
a photocatalyst reaction unit which can generate a spiral air current;  
a forcible convection unit (3); and  
a circuit control unit (5) which can adjustably control the operation of the forcible convection unit (3), wherein:

~~the first filter unit (4) is disposed below the body (1) and has a front surface in shape of with an opening so as to communicate communicating with the outside and a rear surface in communication with the forcible convection unit (3), and~~

~~the forcible convection unit (3) is disposed between the first filter unit (4) and the photocatalyst reaction unit so as to communicate so the first filter unit (4) communicates with the photocatalyst reaction unit, characterized in that:~~

~~the photocatalyst reaction unit includes an air duct (21), a photocatalyst coating layer (22) disposed on an interior wall of the air duct (21), two lamp holders (24), at least one ultra violet ray tube (23) mounted on the two lamp holders (24), and a blow guide holder (26) on which a spiral blow guide blade (25) is mounted,~~

~~wherein two ends of the air duct (21) are hermetically connected to left and right side plates of the body (1), respectively,~~

~~the air duct is provided includes, at a left side thereof with, an air inlet port which is in communication with the air outlet port of the forcible convection unit (3), in a tangential direction thereof, at a right side thereof, and with an air outlet port in a tangential direction thereof,~~

~~two ends of each ultra violet ray tube (23) are mounted on the lamp holders (24) and axially disposed inside the air duct (21), respectively;~~

~~the blow guide holder (26) is provided located on the left side plate and located at a position of the air inlet port of the air duct (21), and~~

one of the two lamp holders ~~(24)~~ is connected to the right side plate of the body ~~(1)~~, and the other ~~one~~ lamp holder is connected to the blow guide holder ~~(26)~~.

2. (Currently Amended) The air cleaning device with a photocatalyst according to claim 1, ~~characterized in that: wherein~~ the air duct ~~(21)~~ is composed of includes two elongated housings, each housing having a semi-circle section, which can be abutted with each other, wherein each of the two semi-circle shaped housings ~~is provided~~ includes, at a lower left side ~~thereof with~~, a recess so that ~~two~~ the recesses of the two ~~housing~~ housings can be abutted with each other so as to form ~~an~~ the air inlet port.

3. (Currently Amended) The air cleaning device with a photocatalyst according to claim 1 ~~or 2, characterized in that: wherein~~

the interior wall of the air duct ~~(21)~~ is formed into ~~an accidented~~ includes a surface with undulations, and

the photocatalyst coating layer ~~(22)~~ is coated onto coats the ~~accidented~~ surface with undulations of the interior wall of the air duct ~~by a spraying or impregnating process~~.

4. (Currently Amended) The air cleaning device with a photocatalyst according to claim 1 ~~or 2, characterized in that: wherein~~

the ~~first~~ filter unit ~~(4)~~ includes a dust blocking web ~~(42)~~ and a movable door ~~(41)~~ ~~which~~ ~~are provided~~ on a front housing ~~(11)~~ of the body ~~(1)~~, ~~wherein~~

the dust blocking web ~~(42)~~ is a filter web made of active carbon or high-efficiency HEPA filtering materials or a combination thereof, and

the movable door ~~(41)~~ is disposed on a front side of the dust blocking web ~~(42)~~ and ~~provided with~~ includes an air suction grill.

5. (Currently Amended) The air cleaning device with a photocatalyst according to claim 1 ~~or 2, characterized in that: wherein~~

the forcible convection unit ~~(3)~~ is configured to be includes a blower ~~consisting of~~ having

a motor (31) ~~which is provided~~ located between a front housing and a rear housing of the body (1) and connected to the circuit control unit (5), and a plurality of blades (32) ~~which are~~ mounted on a ~~rotation~~ rotating shaft of the motor (31), wherein and

an air inlet port of the blower is in communication with the ~~first~~ filter unit (4) and an air outlet port ~~thereof~~ of the filter unit is in communication with an air inlet port of the photocatalyst reaction unit.